OPERATING SYSTEM - CS23431

EXP 6(D)

ROUND ROBIN CHEDULING

NAME: KAAVIYA.R **ROLL NO: 230701504**

PROGRAM:

```
#include <stdio.h>

int main() {
    int n;
    printf("Enter number of processes: ");
    scanf("%d", &n);

    int p[n], a[n], bt[n], temptbt[n], slot;
    printf("Enter process ID, arrival time, burst time for each process:\n");
    for (int i = 0; i < n; i++) {
        scanf("%d %d %d", &p[i], &a[i], &bt[i]);
        temptbt[i] = bt[i];
    }

    printf("Enter quantum time slot: ");
    scanf("%d", &slot);

    int totalwt = 0, totalturn = 0, totaltime = 0;
    int i = 0, count = 0, completed = 0;

    printf("P_ID\tBT\tTAT\tWT\n");
```

```
while (completed != n) {
    if (temptbt[i] <= slot && temptbt[i] > 0) {
        totaltime += temptbt[i];
        temptbt[i] = 0;
        count = 1;
    }
    else if (temptbt[i] > 0) {
        totaltime += slot;
        temptbt[i] -= slot;
    }

    if (temptbt[i] == 0 && count == 1) {
        completed++;
        int tat = totaltime - a[i];
        int wt  = totaltime - a[i] - bt[i];
        printf("%d\t%d\t%d\t%d\n", p[i], bt[i], tat, wt);
        totalwt += wt;
        totalturn += tat;
        count = 0;
    }

    if (i == n - 1)
        i = 0;
    else
        i++;
}
```

```
    printf("Average waiting time is %d\n", totalwt / n);
    printf("Average turn around time is %d\n", totalturn / n);


    return 0;
}
```

OUTPUT: